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Form PTO-1449 (REV. 8-83)		US Dept. of Commerce PATENT & TRADEMARK OFFICE		ATTY DOCKET NO. 104959		APPLICATION NO. 09/736,151	
INFORMATION DISCLOSURE STATEMENT				APPLICANTS Ali LAAYOUN et al			
				FILING DATE December 17, 1999		GROUP <del>1632</del> 1637	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
S.T	A	5,171,853	12/1992	Thorp et al.	538	27	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
S. T	B	EP 0 801 072 A	10/1997	Europe	C07H	21/02	
	C	DE 198 15 864 A1	10/1999	Germany (& Abstract)	C07H	19/20	
	D	WO 93/20241	10/1993	WIPO	C12Q	1/68	
	E	WO 98/27229	06/1998	WIPO	"	"	
Joye	F	WO 99/65926	12/1999	WIPO (& Abstract)	C07H	21/00	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
EXAMINER				DATE CONSIDERED			
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		FILING DATE December 15, 2000	GROUP 1637

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
J. Tung		5,449,767	09/12/95	WARD et al.	536	24.3
		5,328,824	07/12/94	WARD et al.	435	6
		5,317,098	05/31/94	SHIZUYA et al.	536	23.1
		5,585,481	12/17/96	ARNOLD, JR. et al.	"	25.33
		4,683,195	07/28/87	MULLIS et al.	435	6
		4,683,202	07/28/87	MULLIS	"	9/
J. Tung		4,800,159	01/24/89	MULLIS et al.	"	172.3

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS
J. W		EP A 0 097 373	01/04/84	EUROPE	207H	21/00
		EP A 0 329 198	08/23/89	EUROPE	"	19/10
		EP A 0 302 175	02/08/89	EUROPE	"	21/00
		EP A 0 063 879	11/03/82	EUROPE	"	19/20
J. W		EP A 0 567 841 w/Abstract	11/03/93	EUROPE	"	19/04

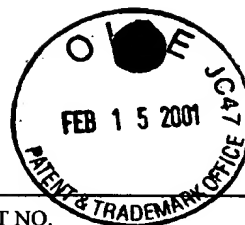
## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

J. T		CHEE, M. et al., "Accessing Genetic Information with High-Density DNA Arrays," Science, Vol. 274, pp. 610-614, 1996.
		CAVIANI PEASE, A. et al., "Light-generated oligonucleotide arrays for rapid DNA sequence analysis," Proc. Natl. Acad. Sci. USA, Vol. 91, pp. 5022-5026, 1994.
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J. T		BRESLOW, R. et al., "Recognition and catalysis in nucleic acid chemistry," Proc. Natl. Acad. Sci. USA, Vol. 90, pp. 1201-1207, 1993.

EXAMINER	<i>Joyce Tung</i>	DATE CONSIDERED 9/24/2002
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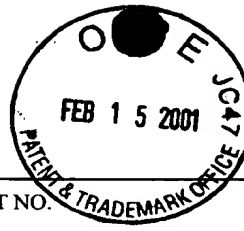
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
J. Tung		4,786,600	11/22/88	KRAMER et al.	435	235	
		5,744,305	04/28/98	FODOR et al.	"	6	
		5,445,934	08/29/95	FODOR et al.	"	"	
		5,554,516	09/10/96	KACIAN et al.	"	9/12	
		5,422,252	06/06/95	WALKER et al.	"	r	
		4,868,105	09/19/89	URDEA et al.	"	6	
J. Tung		5,124,246	06/23/92	URDEA et al.	"	1	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
J. Tung		EP A 0 320 308	06/14/89	EUROPE	C12B	1/68	
		EP A 0 286 898	10/19/88	EUROPE	C07H	21/02	
		EP A 0 280 058	08/31/88	EUROPE	H04N	9/82	
		EP A 0 709 468	05/01/96	EUROPE	C12B	1/68	
J. Tung		WO A 93/16094	08/19/93	WIPO	C07H	21/00	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
J. Tung	✓	HOVINEN, J. et al., "Imidazole Tethered Oligodeoxyribonucleotides: Synthesis and RNA Cleaving Activity," J. Org. Chem., Vol. 60, pp. 2205-2209, 1995.					
		BLATTNER, F. et al., "The Complete Genome Sequence of <i>Escherichia coli</i> K-12," Science, Vol. 277, pp. 1453-1462, 1997.					
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		CHEVALIER, J. et al., "Biotin and Digoxigenin as Labels for Light and Electron Microscopy in Situ Hybridization Probes: Where Do We Stand?" J. Histochem. Cytochem., Vol. 45, No. 4, pp. 481-491, 1997.					
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J. Tung		TROESCH, A. et al., "Mycobacterium Species Identification and Rifampin Resistance Testing with High-Density DNA Probe Arrays," J. Clinical Microbiol., Vol. 37, No. 1, pp. 49-55, 1999.					
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
J. Tung		5,130,238	07/14/92	MALEK et al.	435	91	
		5,399,491	03/21/95	KACIAN et al.	"	91.21	
		5,684,149	11/04/97	MORROW	540	474	
		5,437,990	08/01/95	BURG et al.	435	91.21	
		5,605,796	02/25/97	CHEN et al.	"	6	
J. Tung		5,766,849	06/16/98	McDONOUGH et al.	"	1	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
J. Tung		WO A 88/04300	06/16/88	WIPO	C07H	17/02	
		WO A 88/01302	02/25/88	WIPO	C12Q	1/68	
		WO A 88/10315	12/29/88	WIPO	"	"	
		WO A 93/22461	11/11/93	WIPO	"	"	
J. Tung		WO A 94/03472	02/17/94	WIPO	C07H	21/04	
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J. Tung		FURUTA, T. et al., "Direct Esterification of Phosphates with Various Halides and its Application to Synthesis of cAMP Alkyl Triesters," J. Chem. Soc. Perkin Trans., Vol. 1, pp. 3139-3142, 1993.					
J. Tung		SAMBROOK, J. et al., "Removal of Ethidium Bromide from DNAs Purified by Equilibrium Centrifugation in CsCl-Ethidium Bromide Gradients," Plasmid Vectors, 2nd Edition, p. 1.46, 1989.					
		<del>AmpliScribe™ T7, T3, and SP6 High Yield Transcription Kits Product Information, Epicentre Technologies, pp. 1-3, Date Unknown.</del>					
J. Tung		ZUCKERMANN, R. et al., "Site-selective cleavage of structured RNA by a staphylococcal nuclease-DNA hybrid," Proc. Natl. Acad. Sci. USA, Vol. 86, pp. 1766-1770, 1989.					
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J. Tung		NAKAMAYE, K.L. et al., "Direct sequencing of polymerase chain reaction amplified DNA fragments through the incorporation of deoxynucleoside $\alpha$ -thiotriphosphates," Nucleic Acids Res., Vol. 16, No. 21, pp. 9947-9959, 1988.					
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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
J. Tung		5,525,464	06/11/96	DRMANAC et al.	435	6	
		5,202,231	04/13/93	DRMANAC et al.	11	19	
		5,807,522	09/15/98	BROWN et al.	422	50	
		5,700,637	12/23/97	SOUTHERN	435	6	
		5,981,734	11/09/99	MIRZABEKOV et al.	536	656	
		5,582,829	12/10/96	ALLIGER et al.	424	234.1	
S-W		5,688,670	11/18/97	SZOSTAK et al.	435	91.21	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
J. Tung		WO A 95/03430	02/02/95	WIPO	C12Q	1/08	
		WO A 95/08000 w/Abstract	03/23/95	WIPO	"	"	
		WO A 95/11995	05/04/95	WIPO	"	"	
		WO A 96/19729 w/Abstract	06/27/96	WIPO	G01N	33/53	
J. Tung		WO A 94/29723 w/Abstract	12/22/94	WIPO	"	33/547	
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J. Tung		RUFFNER, D.E. et al., "Thiophosphate interference experiments locate phosphates important for the hammerhead RNA self-cleavage reaction," Nucleic Acids Res., Vol. 18, No. 20, pp. 6025-6029, 1990.					
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J. Tung		KUIMELIS, R.G. et al., "Cleavage properties of an oligonucleotide containing a bridged internucleotide 5'-phosphorothioate RNA linkage," Nucleic Acids Res., Vol. 23, No. 23, pp. 4753-4760, 1995.					
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
J. Tr		5,989,904	11/23/99	DAS et al.	435	320.1	
J. Tr		5,407,797	04/18/95	MARLIERE et al.	"	6	
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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
J. Tr		WO A 90/14439	11/29/90	WIPO	C12G	1/64	
		WO A 98/11104 w/Abstract	03/19/98	WIPO	C07D	405/04	
		WO A 96/28460 w/Abstract	09/19/96	WIPO	C07H	21/00	
		WO A 95/03142 w/Abstract	02/02/95	WIPO	B09B	1/00	
J. Tr		WO A 98/05766 w/Abstract	02/12/98	WIPO	C12N	15/10	
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J. Tr		WRZESINSKI, J. et al., "Specific RNA cleavages induced by manganese ions," FEBS Letters, Vol. 374, pp. 62-68, 1995.					
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J. Tr		FIDANZA, J.A. et al., "Introduction of Reporter Groups at Specific Sites in DNA Containing Phosphorothioate Diesters," J. Am. Chem. Soc., Vol. 111, pp. 9117-9119, 1989.					
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J. W.		DE A 3 910 151 w/Abstract	10/04/90	GERMANY	C12P	19/34
↓		FR 2 781 500 w/Abstract	01/28/00	FRANCE	C12M	1/06
↓ J. W.		FR 2 768 743 w/Abstract	03/26/99	FRANCE	"	"

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J. T.		FIDANZA, J.A. et al., "Site-Specific Labeling of DNA Sequences Containing Phosphorothioate Diesters," J. Am. Chem. Soc., Vol. 114, pp. 5509-5517, 1992.
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EXAMINER	<i>J. W.</i>	DATE CONSIDERED 9/24/2002
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JT		CHENG, J. et al., "Preparation and hybridization analysis of DNA/RNA from <i>E. coli</i> on microfabricated bioelectronic chips," Nature Biotechnol., Vol. 16, pp. 541-546, 1998.					
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JT		KOZAL, M.J., "Extensive polymorphisms observed in HIV-1 clade B protease gene using high-density oligonucleotide arrays," Nature Med., Vol. 2, No. 7, pp. 753-759, 1996.					
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